

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-030109**Date Inspected:** 25-Sep-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Bernie Docena**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** SAS Tower**Summary of Items Observed:**

Caltrans Quality Assurance Inspector (QA) Joe Adame arrived at the American Bridge/Fluor (ABF) JV job site between the times noted above in order to monitor ABF Quality Control activities and the in process work being performed by ABF production personnel. The following items were observed:

ESW Repair Excavation

RWR-201308-009

ESW W-042, Location "M"-Face A:

The QA Inspector observed ABF welder Mike Jimenez (WID-4671) setting up equipment to perform repair excavation of Electroslag Weld (ESW) "M" Face A @ Original Y's-5670mm,5700mm & 5720mmmm. Mr. Jimenez informed the QA Inspector that he will have to have a more suitable scaffold or platform built to safely access the repair location at Face A. The QA Inspector later observed the excavation work did not commence on this date. ABF QC Inspector Bernie Docena marked the repair excavation information at Face A.

NDT Inspection of Electroslag Welds (ESW)

RWR-201308-004

ESW S-043, Location "T"-Face A, B:

The QA Inspector observed ABF QC Inspector Bernie Docena performing Ultrasonic Testing (UT) on Tower Electroslag Complete Joint Penetration (CJP) weld designated as ESW "T" Face A, B. The inspection was being performed on SMAW repairs. The "Y" Locations were noted as: Y=2100mm,2130mm,3090mm,3110mm, 3175mm,3190mm & additional HAZ areas located 300mm above and below the prosed repair.

No rejectable or recordable indications were observed.

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The QA Inspector also performed UT of the above mentioned ESW location in accordance with the ABF approved supplemental procedure for confirmation and evaluation of planar type defects. Tandem report for work performed on this date will be completed by Mr. Docena and signed by both QA/QC parties. Items listed on tandem report reflect indications agreed upon by QA/QC. See TL-6027 for additional details on the items inspected on this date

ESW Repair excavation

RWR-201308-007

ESW N-042, Location "J"-Face B:

The QA Inspector observed ABF welder Donald Plumb (WID-0891) performing excavation of ESW "J" at Face B, Y= 3460mm,3480mm,3550mm,3570mm to verify remove planar indications observed during Ultrasonic Testing (UT) with pulse/echo & pitch/catch. Mr. Plumb was performing the excavation using an air carbon arc cutter and a grinder. Mr. Plumb was instructed by ABF QC Inspector Bernie Docena to notify him when indications are visible to allow QC/QA time to inspect the excavation. The repair location was noted as:

Weld excavated at: D=20mm- No indications observed.

Weld excavated at: D=30mm- 50mm long planar indication observed @ Y-3400mm.

Weld excavated at: D=40mm- Planar indication removed. No other indications observed.

Excavation Length: (Y-3380mm~3780mm)

L=400mm

W-60mm

D-40mm

After grinding to bright metal the QC Inspector performed Magnetic Particle Testing (MT) of the final excavation. The QC Inspector stated the excavation appears to be free of discontinuities and he would complete ABF daily inspection report and magnetic particle testing report to detail the findings. Mr. Docena also stated that since the indication observed & removed at 30mm deep appeared to be a significant planar indication (centerline crack) the repair will also be performed at Face "A" of the ESW weld at this Y location to ensure complete removal of the discontinuity. The QA Inspector also performed an MT verification of the final excavation. See TL-6028 for additional details on items inspected on this date. Mr. Plumb was later observed setting up the Miller ProHeat 35 induction blankets at the repair location in preparation for SMAW of the repair excavation.



Summary of Conversations:

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Only general conversations with ABF/JV QC NDT personnel relevant to work and testing performed during this shift.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Adame,Joe	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer
